

2016 I-3 Occupancy Working Group

Working Group Report and Recommendations



CAL FIRE – Office of the State Fire Marshal
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Acknowledgements

This report was developed through the culmination through outstanding collaborative efforts of the many disciplines involved with the Office of the State Fire Marshal **2016 I-3 Occupancy Codes Working Group**.

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Executive Summary

The purpose of this committee will be to advise the State Fire Marshal on all matters relating to fire and panic safety regulations and building standards relating to facilities where persons are restrained. This process shall strive to provide a safe, code compliant environment that meets the needs of the owner/facility operations including security, cost effectiveness, constructability, and sustainability. To identify facilities or portions thereof, where persons are restrained that would be classified by the California Building Code as group I-3 occupancies.

This working group is made up of very talented individuals with many years of combined experiences in the fields of architecture and design, fire protection engineering, construction managements and regulatory enforcement for detention facilities. Many of these individuals have tremendous experience working with current and prior code editions. This working group is tasked to identify problematic issues and to find ways and means to resolve any conflicts and find way to improve regulations related to detention facilities. Several areas that the working group has identified that they will be working on are as follows:

Definitions are an important part of construction design and plan review. This working group will be reviewing specific definitions related to the detention environment to coordinate common terms utilized in the detention and design worlds with defined code terminology. Part of this coordination will involve revising some defined terms and/or recommending new terms to be defined for the upcoming code cycle.

A significant area of concern that helped spark the formation of this current working group is the difficulty of designing project to utilize the intervening room rule as noted in CBC 408.1.2.2 while meeting the fire and life safety requirements of the original intent when this section was adopted in the 2013 code edition. This working group is tasked to find ways and means to resolve this issue for the benefit of all constituents.

The changing environment in detention facilities for the accommodation of health care programs for prison populations and the security of mental health patients within our hospitals is challenging current regulations. Although, regulatory authorities have attempted to regulate these uses fairly and equally, the codes have lacked clear guidance to the planners and designers which leave many areas open to a wide variety of interpretations. This working group is tasked to review current practices for health care in prison and jails and security of mental health patients in locked buildings, and to find

ways and means to accommodate these functions within buildings designed with appropriate levels of protection based on their use and occupancy.

The last challenge that was laid before this committee was to address ongoing changes and/or problems with detention design and code compliance. The working group is asked to provide recommendations on resolving design conflicts and improved methods of providing correct information to designers, project managers, program managers, and code compliance specialists.

Working Group Scope

The scope of the project is to review and evaluate the current California Code of Regulations, Title 24 – California Building Code, Group I-3 provisions and other facilities or occupancies where persons can be restrained to determine if revisions (amendments) are needed for the next California Code cycle. The task group will develop and provide recommendations to the State Fire Marshal for consideration and/or implementation. We anticipate completion of this project within six (6) months.

Goals

At the first meeting the Working Group collectively decided what the goals of the committee would be. They were:

1. Provide clarity to all stakeholders.
 - Keep the Working Group intact after the formal recommendations. Working group will reconvene every 18 months to determine if additional changes are needed to the CBC due to changes in construction methods, technology, operational impacts, and program needs.
 - Better communication between Stakeholders regarding new code and interpretations
 - Provide balance between fire and life safety and security.
2. Provide unified consensus for regulations and standards.
 - Look at all regulations and codes for accuracy, ambiguity and consistency as they relate to areas where persons are restrained.
 - Review and make recommendations for proposed code changes to the State Fire Marshal in accordance with Health and Safety Code Section 18930.
3. Evaluate the California Building Standards to determine the threshold of restraint and when an occupancy becomes an I-3.
 - Research needs to be conducted to look at statute to determine if any sections specifically address restraint.
 - The conflicts between I-2 and I-3 needs to be addressed.
 - Is the definition of restraint within the CBC appropriate? Can additional clarity be provided?

Recommendations

The following are the I-3 Occupancy Codes Task Force's core recommendations. These recommendations will clarify, define, and amend Jail, Prison, and Courthouse construction in California, and enhance fire and life safety throughout the industry.

Proposed Changes to Title 24

The following changes are to the 2016 edition of the California Building Standards. All changes are to the California Building Code and/or the California Fire Code.

Matrix of corresponding code sections

<u>Item</u>	<u>CBC Code Section</u>	<u>CFC Code Section</u>
1.	202	202
2.	202	202
3.	202	202
4.	308.1	202
5.	308.5	202
6.	308.5.6	
7.	407.1.2	
8.	408.1.2.2	
9.	408.1.3	
10.	408.2.1	
11.	408.3.12	
12.	408.9	
13a.	508.2.4	
13b.	508.3.3	
14.	Table 803.11	Table 803.3
15a.	804.4.1	
15b.	804.4.2	
15c.	804.4.3	
16.	907.2.6.2.2	907.2.6.2.2
17.	907.2.6.3.3.1	907.2.6.3.3.1
18.	1010.1.9.6	1010.1.9.6
19.	Table 1004.1.2	Table 1004.1.2
20.	1015.2	1015.2
21.	1016.2	1016.2
22.	1020.1	1020.1
23.	1028.5	1028.5

1. Add new definitions for Control Room, Correctional Hospitals, Correctional Medical or Mental Health Housing Suite, Correctional Mental Health Facilities,

Correctional Nursing Facilities, Correctional Treatment Centers, Custody Station, Detention Program Suite, Housing Pod, and Intake and Release areas.

CBC 202 CONTROL ROOM. *A room that has staff that provide direct supervision of one or more, cell tiers, pods, dormitories, housing units, sally ports, central holding areas, individual holding cells within central holding, as well as any number of courtroom holding cells and arraignment docks, and may have fire and personal alarm annunciation, ability to open and close doors, communicate with Central Control and monitor activities inside the area of control and the space immediately outside the Control Room's zone of influence.*

CBC 202 CORRECTIONAL HOSPITALS. *Facilities that provide care and treatment for medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.*

CBC 202 CORRECTIONAL MEDICAL OR MENTAL HEALTH HOUSING SUITE. *Within a state prison, correctional treatment facility, local detention facility, or juvenile facility, a correctional medical or mental health housing suite shall be a group of patient rooms or cells and support spaces, including nurses' stations, located around shared circulation.*

CBC 202 CORRECTIONAL MENTAL HEALTH FACILITIES. *Facilities that provide care and treatment for psychiatric treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.*

CBC 202 CORRECTIONAL NURSING FACILITIES. *Facilities that provide care, including both intermediate care facilities and skilled nursing facilities where any of the persons are incapable of self-preservation or classified as non-ambulatory or bedridden within a detention facility such as a prison or jail.*

CBC 202 CORRECTIONAL TREATMENT CENTERS. *Facilities that provide emergency and acute care and treatment for medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.*

CBC 202 CUSTODY STATION. *A desk or platform staffed by one or more custody officers whose purpose is to supervise those in custody.*

CBC 202 DETENTION PROGRAM SUITE. *Within a state prison, correctional treatment facility, local detention facility, or juvenile facility, a detention program suite shall be a group of program related spaces, not classified as group F uses, located around shared circulation.*

CBC 202 HOUSING POD. *A section of a housing unit designed to segregate different populations. Housing Pods contain sleeping areas, dayroom space, showers, toilet facilities, and support space.*

CBC 202 INTAKE AND RELEASE AREAS. *A temporary holding suite where detained and/or incarcerated individuals are received and processed into a facility or are released from the facility. The suite may contain holding cells, sobering and safety cells, medical examination space, interview rooms, property storage, and staff work areas.*

Rationale:

The I-3 Occupancy Codes Task Force reviewed current definitions and determined that it would be appropriate to provide greater guidance for clarity of code requirements by adding these definitions based on code proposal within this report and clarify use conditions already in practiced throughout the state. The proposed definitions are to provide additional clarity and uniformity to the terms used with applicable CCRs and Building code already established.

2. Revise definition for Cell Tiers.

CBC 202 CELL TIERS. *Cells, dormitories and accessory spaces. Cell tiers are located one level above the other, and do not exceed two levels per floor. A cell tier shall not be considered a story or mezzanine. The aggregate area of a tier within a housing pod shall not be greater than one-third of the floor area of that pod when supported by non-rated construction, and shall be no greater than two-thirds of the floor area of the pod when the tier floor and supporting elements meet the fire rating requirements of a floor.*

Rationale:

The SFM definition specifically notes that a tier shall not be considered a story or a mezzanine, but the 2013 code is silent on how much of the floor area can be taken up by a tier. In determining the appropriate area of a tier the code lacked guidance. The closest similar construction is a mezzanine and a mezzanine is limited to one-third of the floor area of the space. Thus, the SFM determined that a tier could not exceed one-third of the floor area of the space. The committee reviewed this issue and through extensive discussion and consensus, and determined that where the

building is constructed of Type I construction, and the floor is constructed of a 2-hour fire rating, in accordance with Table 601, it would be acceptable to construct a tier of up to two-thirds of the floor area. The tier is an essential part of housing units in the form of a pod. Within Type I construction, a tier up to two-thirds of the floor area, would not present a higher threat than a tier of one-third floor area for other types of construction. The greater limitation is the security aspects of being to provide line of sight observation. However, security aspects are not a fire and life safety consideration, thus the option of constructing the tier up to two-thirds of the floor area. The added language to the definition of cell tiers clarifies this issue and a statement in the commentary further clarifies that floor penetrations in the tier do not need to be protected.

3. Revise definition for Housing Unit.

CBC 202 HOUSING UNIT. ~~A dormitory or a group of cells with a common dayroom in Group I-3. A building or portion of a building~~ *An area intended to lodge inmates on a 24-hour basis where accommodations are provided for sleeping and other inmate support areas. A Housing Unit may contain one or more housing pods.*

Rationale:

The I-3 Occupancy Work Group reviewed the definition for "housing unit" and proposed to change the definition to clarify use conditions already in practice throughout the state. The current definition does not adequately define the specific use of a "housing unit."

4. Add provisions for restraint in Group I-2 occupancies where necessary for protection of certain patients.

CBC 308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which care or supervision is provided to persons who are or are not capable of self-preservation without physical assistance or in which persons are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-2.1, I-3 or I-4. *Restraint shall not be permitted in any building except in Group I-2 occupancies constructed for such use in accordance with Section 407.1.2 and Group I-3 occupancies constructed for such use, in accordance with Section 408.1.2, see Section 408.1.1.*

Where occupancies house both ambulatory and nonambulatory persons, the more restrictive requirements shall apply.

Rationale:

The I-3 Occupancy Codes Task Force is proposing a modification to the State amendment permitting restraint in Group I-3 solely. Requirements pertaining to Group I-2 Occupancies regulate hospitals, nursing homes and psychiatric hospitals housing patients. Requirements pertaining to Group I-3 Occupancies regulate jails, prisons, reformatories and other buildings where the personal liberties of persons are restrained. The character of restraint in facilities classified as Group I-3 is incarceration, imprisonment, detention or criminal custody of prisoners and inmates. Because the requirements contained in the California Building Code do not address portions or areas of Group I-2 Occupancies where both nonambulatory and restrained patients are housed, it is unclear whether the requirements for Group I-2 or Group I-3 occupancies apply to buildings or areas housing both nonambulatory and restrained patients. This has resulted in the inconsistent application of California Building Code requirements in these types of facilities.

Seismic compliance laws are resulting in many hospitals rebuilding their facilities and removing Acute Care Services from portions of their campuses. These building are otherwise serviceable and capable of providing other types of healthcare. This, coupled with an ever-increasing need for mental health care in California, makes these areas well suited for repurposing to psychiatric or mental health care. Group I-2 occupancies currently provide care for mental health patients under conditions of restraint. Most code writing agencies, including ICC, NFPA and the AIA Facility Guidelines Institute, acknowledge and permit the locking of areas of Group I-2 occupancies that provide care for certain patients where it is necessary to lock doors and bar windows to protect building inhabitants, including patients with dementia, mental health care needs, infant care, pediatric care, or patients under court detention order requiring medical treatment in a health care facility.

Historically California has held that persons who are 'restrained' (by definition) can only be housed in I-3 occupancies. These I-3 code provisions regulate facilities housing persons who are incarcerated or otherwise held in a condition of detention and do not contain many of the healthcare-related provisions required for nonambulatory patients receiving medical or psychiatric care. These proposed revisions to the California Building Code acknowledge and allow for the holding of psychiatric or mental health patients under conditions of restraint in a Group I-2 hospital setting while

providing the requisite level of safety and fire protection currently enjoyed in detention facilities.

5. Add provisions for healthcare in detention facilities in Group I-3 occupancies where necessary for protection of certain patients.

CBC 308.5 Institutional Group I-3. Institutional Group I-3 occupancy shall include buildings *or portions of buildings* and structures that are inhabited by *one or more* persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control, *which includes persons restrained*. This group shall include, but not be limited to, the following:

Correctional Centers
Correctional Hospitals
Correctional Nursing Facilities
Correctional Mental Health Facilities
Correctional Treatment Centers
Courthouse Holding Facility
Detention Centers
Detention Treatment Room
Jails
Juvenile Halls
Prerelease Centers
Prisons
Reformatories
Secure Interview Rooms
Temporary holding facility

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.8 (see Section 408.1).

Rationale:

The I-3 Occupancy Codes Task Force has reviewed the current regulations pertaining to healthcare facilities located in places of detention. Within correctional facilities there is an ever-increasing need for medical care, either as a complete medical care facility, such as the CDCR Stockton Central Health Care Facility or the CDCR Correctional Medical Facility (CMF) in Vacaville, or as a distinct part of a State Prison or County Jail. As the average age of the populace of prisons and jails continues to climb and the levels of acuity of the patients deteriorate, the need for more traditional medical facilities that provide similar levels of patient safety and protection within these places of detention is becoming critical.

This proposal is intended to recognize the varying levels of acuity of prisoners who are patients and incorporate the specific healthcare provisions of hospitals, skilled nursing facilities and mental health facilities in correctional settings.

6. Add new I-3 condition to correlate with CBC 308.5

CBC 308.5.6 Condition 9. *This occupancy condition shall include buildings where the use of the building is for correctional medical care or correctional mental health care.*

Rationale:

The I-3 Occupancy Codes Task Force has reviewed the current regulations pertaining to healthcare facilities located in places of detention. Within correctional facilities there is an ever-increasing need for medical care, either as a complete medical care facility, such as the CDCR Stockton Central Health Care Facility or the CDCR Correctional Medical Facility (CMF) in Vacaville, or as a distinct part of a State Prison or County Jail. As the average age of the populace of prisons and jails continues to climb and the levels of acuity of the patients deteriorate, the need for more traditional medical facilities that provide similar levels of patient safety and protection within these places of detention is becoming critical.

This proposal is intended to recognize the varying levels of acuity of prisoners who are patients and incorporate the specific healthcare provisions of hospitals, skilled nursing facilities and mental health facilities in correctional settings.

7. Add CBC 407.1.2 and Revise Table 504.4 to restrict I-2 occupancies with restraint to the same requirements as an I-3. [Author's note: correlates to CBC 308.1]

CBC 407.1.2 Construction. *Occupancies in Group I-2 wherein mental health patients are restrained are permitted to be housed in one story buildings of Type IIA, Type IIIA or Type VA construction provided the floor area does not exceed 5,200 square feet (483m²) between fire walls of two-hour fire-resistive construction with openings protected by fire assemblies having 1-½ hour fire protection rating.*

CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS

TABLE 504.4
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION									
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE	TYPE V	
		A	B	A	B	A	B	HT	A	B
I-2 / I-2.1 ^j	NS ^{d,f}	UL	4	2						
	S (without area increase)	UL	5	3	1	1	NP	1	1	NP
	S (with area increase)	UL	4	2						

i . See Sections 407.1.2 and 408.1.2 for specific exceptions to construction type, allowable building areas and allowable heights.

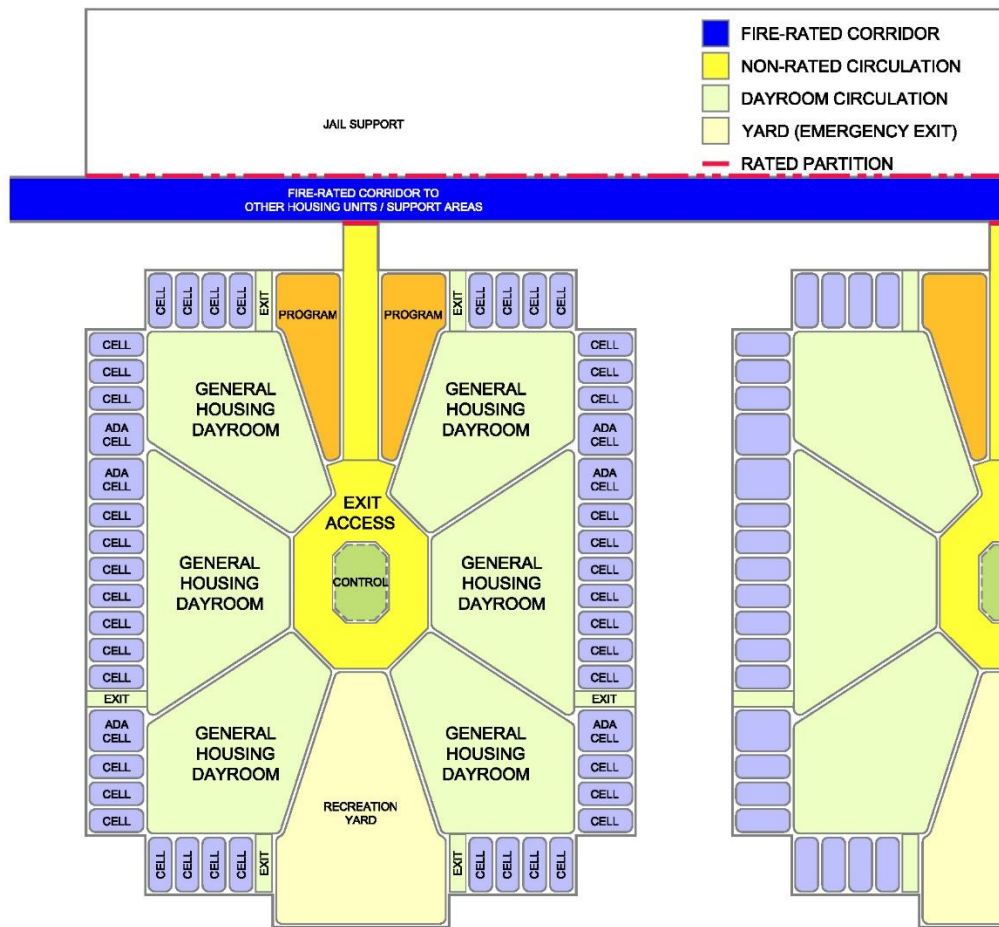
Rationale:

The I-3 Occupancy Codes Task Force are proposing revisions to the California Building Code to acknowledge and allow for the holding of psychiatric or mental health patients under conditions of restraint in a Group I-2 hospital setting while providing the requisite level of safety and fire protection currently enjoyed in detention facilities. This amendment limits the height and area of Group I-2 occupancies where patients are restrained to the same current limitations as Group I-3.

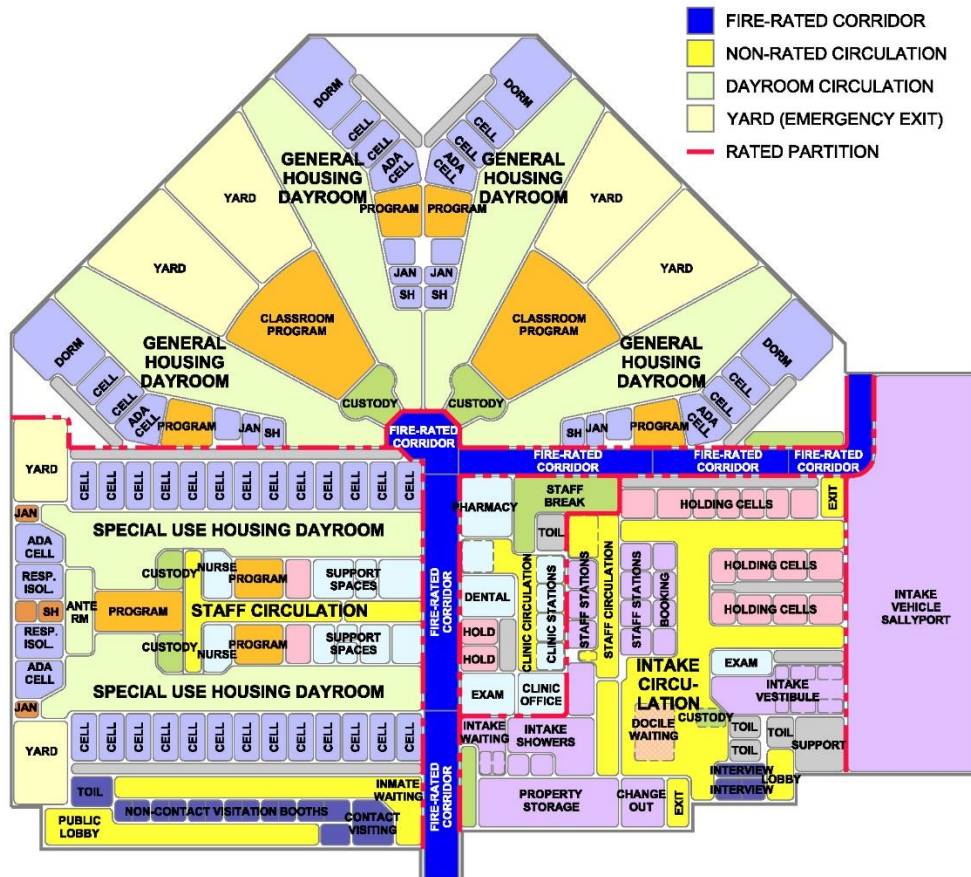
8. Revise CBC 408.1.2.2 for Intervening spaces in I-3 occupancies.

CBC 408.1.2.2 Intervening spaces. *Common rooms and spaces within Group I-3 occupancies can be considered an intervening space in accordance with Section 1014.2, and not considered a corridor, when they meet any of the following:*

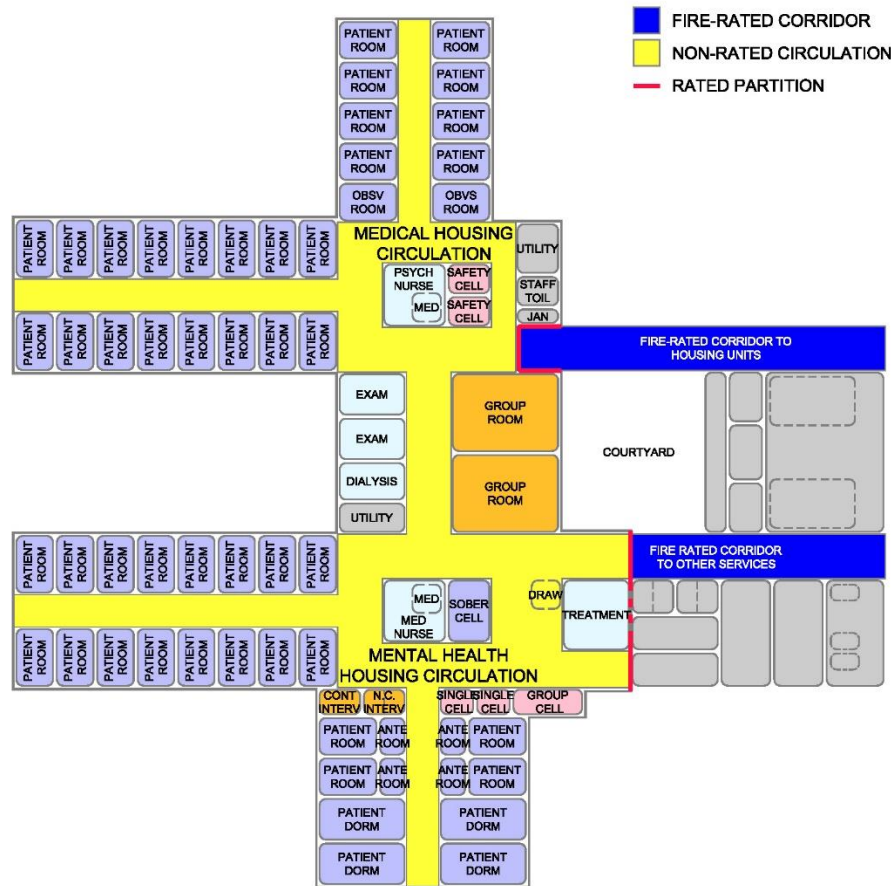
1. Within prisons and local detention facilities of Type I Construction, The inmate and/or staff movement is within cell complexes, medical housing wings and mental health housing wings of Type I construction. the exit access within a housing unit, may be a non-rated corridor provided the required exit occupant load from any dayroom does not exceed 64 persons.



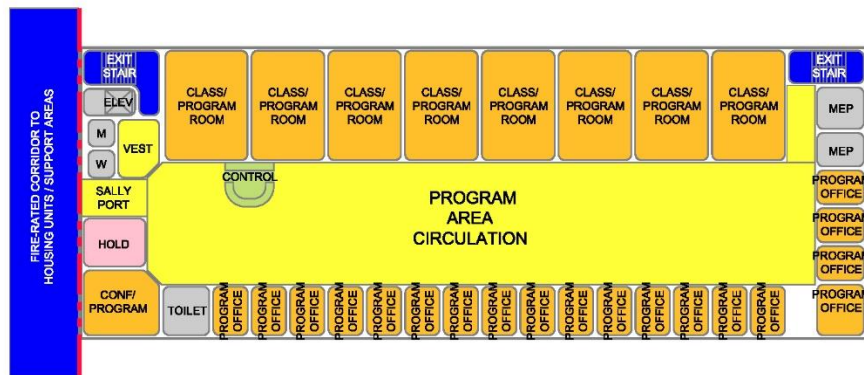
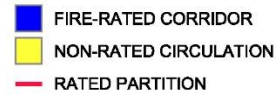
2. Within prison, jails, and courthouses: Area within any temporary holding areas of noncombustible construction and an occupant load less than 100.



3. Within prisons and local detention facilities, Areas within secure mental health treatment facilities correctional medical or mental health housing suites, of noncombustible construction, and an occupant load less than 100.



4. Within prisons and local detention facilities: detention program areas of noncombustible construction and an occupant load less than 100.



Rationale:

The 2013 CBC section 408.1.2.2 Intervening Spaces attempted to update this code section to reflect the current construction methods and to clarify where non-rated corridors were allowed based on the operational and security construction requirements of detention facilities. Previous code cycles allowed partitions of open bars, perforated metal, grilles, or similar construction; however glazed construction is now used as a means to prevent officers from being sprayed by bodily fluids. The 2013 code cycle modifications, to address this issue, were difficult for designers to understand and for code officials to enforce. The new language better clarifies where non-rated corridors are essential due to the limitations of detention construction and the overriding need to provide for maximum visibility from custody stations. Graphic figures, included below, further communicate the intent of these exceptions. The new language maintains fire and life safety which is at least as restrictive as previous code cycles allowed while considering the evolution of jail construction away from open barred partitions.

9. Add new CBC 408.1.3 to allow security doors not to meet testing that they will not be able to meet because of security functions. [Author's note: correlates to CBC 408.1.2.2]

CBC 408.1.3 Security door assemblies in corridors, smoke barriers, and smoke partitions. *Security door assemblies shall be constructed in accordance with NFPA 252 or UL 10C, and where a smoke rating is required UL 1784, and are not required to be tested or labeled.*

Rationale:

This code section simply clarifies where security doors (which cannot meet corridor requirements) are allowed. In reality, it will not change how these buildings are designed, nor how safe they are. It simply streamlines the eventual approval of detention designs which cannot meet strict corridor requirements due to the nature of security needs.

These doors cannot meet corridor requirements because door jambs and heads exceed 4" for which UL designs are tested. Doors have cuff ports and food slots which cannot meet smoke tight requirements of corridor doors. Doors do not have smoke seals because in a detention environment they can be vandalized or used to fashion weapons. Doors may not have closers because in a detention environment they can be vandalized and used to fashion weapons and/or doors with closers adversely affect operations which includes the escorting of inmates. Security hardware is not smoke tight. Speaker ports are not smoke tight. Security glazing may not meet the testing requirements of Section 716.

The corridor walls these doors are placed in are otherwise required to meet fire partition requirements per Section 708. However, the recommended changes would preclude multiple Alternate Means of Protection documents from having to be written and approved by the OSFM office to address the limitations of detention hardware and construction. By requiring that they be constructed per these standards, but not tested or listed, allows the manufacturer to prepare a letter stating as much, and simple approval by the Authority Having Jurisdiction.

10. Revise CBC 408.2.1 based on new I-3 Condition 9 designation. [Author's note: correlates to CBC 308.1]

CBC 408.2.1 Correctional medical and mental health uses. *Where a Group I-2 occupancy in accordance with Section 308.4 and an I-3 occupancy I-3 Condition 9 occurs together in buildings or a portions of a buildings, the*

following Subsections of Section 407 shall apply: 407.2.1; 407.2.2; 407.2.3; 407.3.1; 407.3.1.1; 407.4; 407.11.2.

Rationale:

The I-3 Occupancy Codes Task Force is proposing to modify section 408.2.1 to identify the specific sections of Group I-2 occupancy requirements that need to be incorporated into the design of a healthcare facility located in a place of detention. This proposal also corrects a reference to 407.10, which does not exist.

With the specific Condition 9 designation for health care in the detention environment, it resolves the conflicts of the I-2 and I-3 occupancies, which some AHJ's termed as "overlays" without clear definitions of overlays. This revision provides for this use to still be an I-3 occupancy, because persons are restrained for detention or correctional purposes but recognizes the specific operational needs for medical care while maintaining the same levels of security and fire and life safety as normal I-3 occupancies

11. Add new section CBC 408.3.12 to allow a custody station in a rated corridor similar to a nurse's station in the I-2.

CBC 408.3.12 Custody Station. Spaces for custody stations, communications and related clerical areas shall be permitted to be open to, or located within the corridor, provided the required construction along the perimeter of the corridor is maintained. Construction of custody stations or portions of custody stations, within the envelope of the corridor, is not required to be fire-resistive rated. These provisions shall also apply to an enclosed custody station within the corridor.

Rationale:

Custody stations are a common occurrence in existing and new detention facilities. The current code has no provision for custody station within corridors. The above new section recognizes this need and use. The committee has determined that this new language provides for appropriate guidance for the use of a custody station while maintaining the integrity of the rating of the corridor.

12. Revise CBC 409.9.1 to clarify intent of smoke control in I-3 occupancies.

CBC 408.9.1 Smoke venting. The housing portions of windowless buildings containing use conditions 3, 4 or 5 shall be provided with an engineered smoke control system in accordance with Section 909, windows or doors, smoke

vents, or equivalent means to provide a tenable environment for exiting from the smoke compartment in the area of fire origin. A tenable environment for egress shall be as defined in NFPA 92. If windows, smoke vents or doors are used to meet this section, at least two windows, smoke vents or doors to the exterior must be provided at or above the highest occupied level in each smoke compartment, and the windows or doors must be operable or readily breakable and arranged to manually vent smoke.

Exceptions:

1. ~~Local adult detention facilities, CDCR and CDCR mental health housing facilities~~ Windowless buildings or portions of a building shall be exempt from this section when they that meet each all of the following criteria requirements:

1.1. Are Type IA or IB construction.

1.2. Are protected with sprinklers throughout in accordance with Section 903.3.1.1.

1.3. Include a fire alarm system with smoke detection in accordance with NFPA 72 in the dayroom and/or corridor serving as exit access from the cells, reporting to a 24-hour central control at the institution.

1.4. Include at least one exit from each housing unit ~~that discharges directly to the exterior where smoke will not accumulate or to the exterior through a 1 hour rated corridor serving only that unit.~~

1.5. The building is divided into at least two smoke compartments per Section 408.6.1.

1.6. ~~As approved by the enforcing agency, staffing in the institution is sufficient to an egress analysis shows that inmates can be evacuated inmates within 6 minutes from the smoke compartment of origin 24 hours per day or when inmates are present, as approved by the enforcing agency or the facility is provided with gang or electric locks.~~

2. No venting or smoke control is required when an engineering analysis shows an acceptable safe egress time compared to the onset of untenable conditions within a windowless building or portion of a windowless building and approved by the enforcing agency.

3. Courtroom holding areas and Temporary Central holding areas in Courthouses that they meet all of the following requirements:

3.1. Holding occurs for a duration less than 12 hours.

3.2 The holding areas include no electrical outlets available to the detainees.

3.3. The entire building includes sprinklers throughout in accordance with Section 903.3.1.1.

3.4. The building includes a fire alarm system with smoke detection in accordance with NFPA 72 in the common rooms of holding areas and in the cells of Central holding. The fire alarm system shall activate an alert signal on the floor of alarm containing the holding areas, to alert staff.

3.5. As approved by the enforcing agency, an egress analysis shows that detainees can be evacuated within 5 minutes from the holding area of origin, or the facility is provided with gang or electric locks.

4. Courtroom holding areas with less than 20 persons in custody.

5. Windowless buildings or portions of a building that meet all of the following requirements:

5.1. Are Type IA or IB construction.

5.2. Are protected with sprinklers throughout in accordance with Section 903.3.1.1.

5.3. Include a fire alarm system with smoke detection in accordance with NFPA 72 in the dayrooms and corridors serving as exit access from the cells, reporting to a 24-hour central control at the institution.

5.4. Include at least one direct exit from each housing unit through a smoke partition to another smoke compartment. Each housing unit must be its own smoke compartment and can exit through a maximum of one adjacent compartment before reaching a corridor or the exterior.

5.5. As approved by the enforcing agency, an egress analysis shows that inmates can be evacuated inmates within 6 minutes from the smoke compartment of origin 24 hours per day or when inmates are present, or the facility is provided with gang or electric locks.

5.6. Each housing unit includes a pressurization method smoke control system that complies with Section 909.

Rationale:

The I-3 Occupancy Codes Task Force smoke control sub-committee reviewed the current requirements and determined that the existing exception 1 needed clarification. The subcommittee's goal was to clarify exception 1 and expand the exceptions to the smoke control requirement. New exceptions 3 and 4 address courthouses in particular where occupants can be expected to have limited combustible materials in their possession and are not sleeping overnight. Detainees in courthouse holding are there temporarily and will not accumulate combustibles as they might in cells of jails and prisons. Exception 4 is for courtroom holding less than 20 while exception 3 is for courtroom holding over 20, or the central holding in a courthouse. If exception 4 applies, the additional requirements of exception 3 do not apply. The egress time frame of 5 minutes was chosen based on the conservative average of a number of tenability analyses done over the last 4 years in single story facilities of limited area.

New exception 5 provides another design option for jails and prisons where a direct exterior exit is not available. Instead it applies where occupants can be moved to an adjacent smoke compartment including dayrooms, large program spaces or corridors. The 6-minute egress time frame reflects larger dayrooms of 1 or 2 stories. The pressurization smoke control is expected to maintain the area of fire origin at a negative 0.05-inch water column pressure compared to other unaffected housing areas and the smoke compartment to which occupants are moved. This might be accomplished by an exhaust system in the area of origin or positive pressure in the other areas.

Exceptions 1, 3, 4 and 5 are prescriptive and should not require a tenability analysis to determine the smoke layer descent. Exceptions 1, 3 and 5 may require an analysis of the time required for egress, unless the cells can and will be unlocked simultaneously.

13. Revise section CBC 508.2.4 and 508.3.3 to clarify requirements for accessory and nonseparated occupancies associated with Group I-2 and I-2.1 and I-3 occupancies.

CBC 508.2.4 Separation of occupancies. No separation is required between accessory occupancies and the main occupancy.

Exceptions:

1. Group H-2, H-3, H-4, H-5 and L occupancies shall be separated from all other occupancies in accordance with Section 508.4. 2.

2. Group R-1, R-2, R-2.1 and R-3 dwelling units and sleeping units shall be separated from other dwelling or sleeping units and from accessory occupancies contiguous to them in accordance with the requirements of Section 420.

3. *No separation is required between Group B, E, R-2 sleeping units and S-2 occupancies accessory to Group I-2 and I-2.1 ~~and I-3 of Type I Construction~~. Group I-2 and I-2.1 shall be separated from all other occupancies in accordance with Section 508.4.*

4. *No separation is required between Group A, B, E, R-2 sleeping units and S-2 occupancies accessory to Group I-3 of Type I Construction. Group I-3 and vehicle sallyports shall be separated from all other occupancies in accordance with Section 508.4.*

CBC 508.3.3 Separation. No separation is required between nonseparated occupancies.

Exceptions:

1. Group H-2, H-3, H-4, H-5, I-2, I-2.1 and L occupancies shall be separated from all other occupancies in accordance with Section 508.4.

2. Group I-1, R-1, R-2, R-2.1 and R-3 dwelling units and sleeping units shall be separated from other dwelling or sleeping units and from other occupancies contiguous to them in accordance with the requirements of Section 420.

3. *No separation is required between Group A, B, E, R-2 sleeping units and S-2 occupancies accessory to Group ~~I-2, I-2.1~~ and Group I-3 of Type I Construction. Group I-3 and vehicle sallyports shall be separated from all other occupancies in accordance with Section 508.4.*

Rationale:

In an effort to correct confusion in application of the code, the I-3 Occupancy Codes Task Force reviewed the provisions for accessory occupancies and unseparated occupancies. Prior to the adoption of the International Codes, accessory uses such as offices and similar areas were treated as a portion of the main occupancy. A nursing supervisor's office in a nursing unit or a guard station in holding area of a courthouse was considered part of the unit and no fire-resistance-rated separation was required. However, California Building Code, Sections 508.1, 508.2.2 and 508.3.1 now requires "each portion of a building to be individually classified in accordance with Section 302.1". When no provisions are made for

allowing these related uses to be unseparated from the major use, 2-hour fire barriers are required for individual offices and similar uses. These amendments permit accessory assemblies, office spaces, sleep rooms, and storage areas with an aggregate area of less than 10% of the floor area of a story to be unseparated from Group I-2, I-2.1 and I-3 occupancies. It also allows these uses to be considered unseparated occupancies in Group I-3 detention facilities of Type I construction, but removes this provision for Group I-2 and I-2.1 occupancies as this was never intended to be allowed. Incidental use areas are not affected where regulated by Section 509.

Group A was included in the exception for I-3, but not for I-2 and I-2.1, since dining areas in jails and prisons exclusively serve the inmates incarcerated in the facility, but dining areas in hospitals and skilled nursing facilities serve families, visitors and other members of the public, many of which may not be familiar with the means of egress.

14. Revise CBC Table 803.11 to add new footnote n for I-2 occupancies where restraint is practiced to the same level of protection as an I-3. [Author's note: no change to the rest of the table and this section correlates to CBC 308.1]

TABLE 803.11 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	SPRINKLERED ^l			NONSPRINKLERED		
	Interior exit stairways and interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c	Interior exit stairways and interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c
I-2 ⁿ , I-2.1	B	B	B ^{h, i}	A	A	B

Footnote n. Where patients are restrained in psychiatric treatment areas of Group I-2, finishes shall comply with the requirements of a Group I-3.

Rationale:

The I-3 Occupancy Codes Task Force is proposing to modify section Table 803.11 to afford the same degree of protection for interior wall and ceiling finishes currently applicable to Group I-3 occupancies. The I-3 code provisions regulate facilities housing persons who are incarcerated or otherwise held in a condition of detention and are incapable of taking self-preservation steps unassisted due to the security features of the buildings. Since patients in Group I-2 occupancies are similarly restrained, the flame spread and smoke development requirements for interior wall floor and ceiling finishes will be comparable.

15. Revise CBC sections 804.4.1, 804.4.2, and 804.4.3 for I-2 occupancies where restraint is practiced to the same level of protection as an I-3. [Author's note: no change to the rest of the table and this section correlates to CBC 308.1]

CBC 804.4.1 Test requirement. In all *other* occupancies *except Group I-3 and Group I-2 areas where patients are restrained*, interior floor finish and interior floor covering materials shall comply with the requirements of ASTM Standard E 648, and having a specific optical density smoke rating not to exceed 450 per ASTM E662. For Group I-3 occupancies *and Group I-2 areas where patients are restrained*, see Section 804.4.3.

CBC 804.4.2 Minimum critical radiant flux. In all occupancies, interior floor finish and floor covering materials in enclosures for stairways and ramps, exit passageways, corridors and rooms or spaces not separated from corridors by partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux. The minimum critical radiant flux shall be not less than Class I in Groups I-2 *and R-2.1* and not less than Class II in Groups A, B, E, H, *I-2.1*, I- 4, M, R-1, R-2 and S. *For Group I-2 areas where patients are restrained*, see Section 804.4.3.

CBC 804.4.3 Group I-2 and Group I-3 floor surfaces. Interior floor finish and floor coverings occupied by inmates or patients whose personal liberties are restrained shall be noncombustible.

Rationale:

The I-3 Occupancy Codes Task Force is proposing to modify section 804.4.1, 804.4.2 and 804.4.3 to afford the same degree of protection for wall floor and ceiling finishes currently applicable to Group I-3 occupancies. The I-3 code provisions regulate facilities housing persons who are incarcerated or otherwise held in a condition of detention and are incapable of taking self-preservation steps unassisted due to the security features of the buildings. Since patients in Group I-2 occupancies are similarly restrained, the flame spread and smoke development requirements for interior wall floor and ceiling finishes will be comparable.

16. Add exception to CBC section 907.2.6.2.2 to provide for smoke detection in adjacent compartments of restrained I-2 occupancies to the same level as the smoke detection in the restrained unit when egress is through the adjacent unit.

CFC 907.2.6.2.2 Automatic fire detection. *Smoke detectors shall be provided in accordance with this section.*

1. In patient and client sleeping rooms. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located and shall cause an audible and visual alarm at the respective nurses' station. A nurse call system listed for this function is an acceptable means of providing the audible and visual alarm at the respective nurses' station and corridor room display. Operation of the smoke detector shall not include any alarm verification feature.

Exception: *In patient and client rooms equipped with existing automatic door closers having integral smoke detector, the integral smoke detector is allowed to substitute for the room smoke detector, provided it meets all the required alerting functions.*

2. Group I-2 nurses' stations. A minimum of one (1) smoke detector shall be installed at the nurses' station and centrally located.

3. In waiting areas and corridors onto which they open, in the same smoke compartment, in accordance with Section 407.2.1.

4. In areas where patients are restrained, smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces of smoke compartments and in adjacent smoke compartments where occupants of those compartments utilize the same means of egress.

Rationale:

The I-3 Occupancy Codes Task Force are proposing to amend Section 907.2.6.2.2 to require smoke detection in all occupied spaces of the smoke compartment where patients are restrained to afford quick detection of fire and notification of fire as well as to initiate fire control functions such as releasing locked doors, notifying the fire department, closing doors and dampers, etc. This quick detection, coupled with fire suppression capabilities from the automatic fire sprinkler system, provides the level of fire protection needed to provide staff ample time to relocate bedridden patients or to safely move patients to safe dispersal areas. These provisions are consistent with the level of protection currently required for Group I-3 occupancies.

17. Add new section CBC 907.2.6.3.3.1 to provide smoke detection per an I-2 occupancy when there is healthcare or mental health uses in the I-3.

CFC 907.2.6.3.3.1 Automatic fire detection. For I-3 Condition 9 occupancies, smoke detectors shall be provided in accordance with Section 907.2.6.2.

Rationale:

A new State amendment Section 907.2.6.3.3.1 is added with this proposal to assure that the fire alarm systems in healthcare facilities located in places of detention are designed to the more stringent requirements of an I-2 occupancy, as the patients within the healthcare facility are bedridden or nonambulatory and the level of fire protection in the facilities needs be commensurate with the requirements for Group I-2 occupancies in order to notify staff early to permit them to relocate patients to adjacent smoke compartments rather than to the outdoors.

18. Provide for occupant load factors relating to I-3 detention facilities for specific uses and spaces.

**Table 1004.1.2
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT**

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR
<u>Detention Facilities^c</u>	
<u>Housing Pod</u>	<u>Number of beds^d</u>
<u>Exercise rooms or exercise areas</u>	<u>50 net</u>
<u>Dining areas</u>	<u>15 net</u>
<u>Instructional classroom</u>	<u>20 net</u>

c. Where the path of egress travel from cell tiers or housing areas pass through adjacent dayrooms, the cumulative occupant loads shall be based on the number of beds or occupants in cells; the area of dayrooms accessory to cell tiers or housing areas shall not count towards cumulative occupancy of the housing pod.

d. Based on maximum number of beds in housing pods (not dayroom area)

Rationale:

The I-3 Occupancy Codes Task Force reviewed the provisions for minimum room sizes specified in the California Building Code, Section 1231 and how they affect the occupant load and means of egress design when rooms are larger than the minimum. As Section 1004 requires an occupant load determination for benches at the rate of 1 person per 18 inches of length, the minimum room sizes prescribed in Section 1231 always result in an occupant load greater than the maximum permitted by Section 1231. The provisions relating to intervening accessory areas in the Uniform Codes are no longer as clear in the current version of the California Building Code and dayrooms that are accessory to and serve only cells are having the occupant load compounded. The increased occupant load drives the requirement for additional doors; in detention facilities this not only adds additional costs to

the project, but also represents a significant security concern for operations. If the means of egress door leads from one cell block to another that houses rival gang members, this door will never be used as the resulting hazard to prisoners and correctional officers far outweighs the need to evacuate. There have been reports of executive management ordering these doors to be welded shut after the Certificate of Occupancy has been issued to alleviate this potential security breach. The proposed amendment to table 1004.1.2 provides consistent occupant load factors for means of egress design while clarifying the intent of the Code to discontinue the practice of double-counting prisoners in cell when the pods are open to a dedicated dayroom.

While overcrowding in jails and prisons is a clear and present concern for design of the means of egress, the potential for overcrowding cannot be a factor in the design and construction of a detention facility as this is an enforcement issue. Provisions for permanent and temporary increases of maximum occupant loads are addressed in the California Building Code, Section 1004.2.

19. Recommend SFM adoption of IBC 1010.1.9.6 with noted changes.
[Authors Note: 1010.1.9.6 is model code language that has not been adopted by the state. The I-3 Codes Working Group is proposing to adopt the model code language with the following state amendments.]

CBC 1010.1.9.6 Controlled egress doors in Groups ~~I-1~~ and I-2. Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group ~~I-1~~ or I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 ~~or~~ and an approved automatic smoke ~~or heat~~ detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

1. The door locks shall unlock on actuation of the automatic sprinkler system or automatic ~~fire~~ smoke detection system.
2. The door locks shall unlock on loss of power controlling the lock or lock mechanism.

3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the fire command center, a nursing station or other approved location. The switch shall directly break power to the lock.
4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
5. All ~~clinical~~ staff shall have the keys, codes or other means necessary to operate the locking systems.
6. Emergency lighting shall be provided at the door.
7. The door locking system units shall be listed in accordance with UL 294.

Exceptions:

1. Items 1 through 4 shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
2. Items 1 through 4 shall not apply to doors to areas where a *listed* egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.

Rationale:

The I-3 Occupancy Codes Task Force is proposing to adopt International Building Code Section 1010.1.9.6 with State amendments. This section of model code was not adopted in the previous code cycles since restraint was only permitted in Group I-3 occupancies and the provisions for locking egress doors in Group I-2 occupancies was not permitted. These model code provisions have been in place in other states and have been coordinated and are consistent with the locking provisions permitted in NFPA 101 *Life Safety Code*. These locking provisions exceed the level of safety found in places of detention and are consistent with level of safety for psychiatric facilities in other parts of the nation.

Exception 5 is not being adopted as this is not a building standard and emergency procedures are already required in the California Code of Regulations, Titles 19 and 22.

20. Add an exception to CBC 1015.2 to not require a guard at detention security towers.

1015.2 Where required. Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps, and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with Section 1607.8.

Exception: Guards are not required for the following locations:

[exceptions 1 through 7 unchanged]

8. Elevated facility observation station access hatches at detention facilities.

Rationale:

Code Intent: CBC Section 1015.1 describes and identifies the need for protection of permanent hazards and does not recognize nor identify the temporary nature of the hazardous condition at the guard towers nor the special requirement, training, and procedures for this specific use. The floor hatch of CDCR's guard towers are designed to function as a walking surface so that when closed there is unobstructed circulation for the guard tower officer for 360 degree viewing from the tower.

Issue Overview: The core work process of officers manning the guard towers at CDCR's facilities includes the requirement to move promptly and freely with loaded firearms in all directions around the perimeter of the cab without obstacles in order to observe and prevent inmate or any unauthorized breach of the prison's secure perimeter. CDCR's established procedures for the operation and use of the guard towers provides for constant attendance of the hatch opening when open. Also, for security reasons, the procedure requires the immediate locking of the hatch once an officer has entered the tower cab. Floor hatch operation is infrequent and limited to weapon and ammunition delivery, shift change and access for maintenance.

Approval of alternate means of compliance by Office of the State Fire Marshal; concurrence by Cal/OSHA.

21. Revise exception 6 to CBC 1016.2 to allow restrained I-2 occupancies to egress through a locked intervening space.

CBC 1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

1. Exit access through an enclosed elevator lobby is permitted *in other than a Group I-2 and I-2.1*. Access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.

2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit.

Exception: Means of egress are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

3. An exit access shall not pass through a room that can be locked to prevent egress.

4. Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.

2. Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:

2.1. The stock is of the same hazard classification as that found in the main retail area.

2.2. Not more than 50 percent of the exit access is through the stockroom.

2.3. The stockroom is not subject to locking from the egress side.

2.4. There is a demarcated, minimum 44 inch-wide (1118 mm) aisle defined by full- or partial-height fixed walls or similar construction that will

maintain the required width and lead directly from the retail area to the exit without obstructions.

6. *Exits The means of egress shall not pass through any room subject to locking except in Group I-3 occupancies classified as detention facilities and psychiatric treatment areas in Group I-2 occupancies.*

Rationale:

The I-3 Occupancy Codes Task Force is proposing to amend the State amendment in California Building Code Section 1016.2, Exception 6, to clarify that the means of egress may pass through a room that can be locked to prevent egress in areas of Group I-2 occupancies where patients are restrained. This is consistent with the provisions for Group I-3 occupancies and is required in locations where security locks are provided on smoke compartment doors.

22. Add exception to CBC 1020.1 to reference corridors for I-3 occupancies.

CBC 1020.1 Construction. Corridors shall be fire-resistance rated in accordance with Table 1020.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 for fire partitions.

[Authors Note: Exceptions 1-6 unchanged]

7. *A fire-resistance rating is not required for corridors within Group I-3 occupancies that comply with intervening spaces, see Section 408.1.2.2.*

Rationale:

Refer to the rationale for CBC 408.1.2. The addition of exception 7 here is necessary to clarify special consideration for corridors in detention facilities.

23. Add new exception to CBC 1028.5 to increase the area of refuge for correctional facilities.

CBC 1028.5 Access to a public way. The exit discharge shall provide a direct and unobstructed access to a public way.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

1. The area shall be of a size to accommodate not less than 5 square feet (0.46 m²) for each person.

2. *For other than Group E buildings,* the area shall be located on the same lot not less than 50 feet (15 240 mm) away from the building requiring egress.

For Group E buildings, the area shall be located on the same lot at least 50 feet (15 240 mm) away from any building.

3. The area shall be permanently maintained and identified as a safe dispersal area.

4. The area shall be provided with a safe and unobstructed path of travel from the building.

5. In correctional facilities, the area shall be of a size to accommodate not less than 7 square feet (0.6503 m²) for each person. Accessible path of egress travel to the safe dispersal area and clear ground space for 5% of the occupants meeting 11B-305.3 shall be provided.

Rationale:

The I-3 Occupancy Codes Task Force is proposing a modification to the State amendments Section 1028.5 regarding safe dispersal areas exception 1. It was determined custody staff direct inmates to sit or lie down in safe dispersal area(s) during emergencies. The 5 Square feet per occupant will not provide adequate space. In effort to provide consistency with 2013 CBC Section 1004.2, table 1004.1.2 and 11B-305.3., it was agreed 7 square feet per occupant provides a greater degree of reasonable accommodation.

Estimate Cost of Compliance- ISOR

Title 19

1. Add items e and f to Title 19 Section 3.11 to clarify and limit the amount of combustible materials at nurse stations and custody stations.

Title 19 Section 3.11 Exits, Aisles, Corridors and Passageways.

(a) No person shall install, place or permit the installation or placement of any bed, chair, equipment, concession, turnstile, ticket office or anything whatsoever, in any manner which would block or obstruct the required width of any exit.

(b) No person shall install, place or permit the installation or placement of any combustible material or equipment in or exposed to any exit.

EXCEPTIONS:

(1) Furniture or equipment constructed of wood or other material of similar combustibility may be permitted in an exit or exposed to an exit when approved by the enforcing agency.

(2) When approved by the enforcing agency, combustible materials may be permitted in exit foyers and lobbies.

(c) No person shall install, place or permit the installation or placement of any storage material of any kind in any exit regardless of the required width of the exit.

EXCEPTION: Personal material located in metal lockers in Groups B and E Occupancies as defined in Part 2, Title 24, CCR.

(d) Aisles shall not be occupied by any person for whom seating is not available.

(e) The following items may be placed in or at a nurse station that opens directly onto a fire-resistive exit access corridor system in an I-2 occupancy provided the nurse stations are protected as required by the California Fire Code and California Building Code

(1) File cabinets and wall mounted wood or metal cabinets for records and/or medication, use and storage in quantities necessary for the function of the nurse station.

(2) A maximum of two (2) under-counter refrigerators or one (1) upright refrigerator limited to the storage of patient medications or patient foods. The refrigerator shall be of recent manufacture and in good condition.

(3) Patient monitors and other computer technology equipment necessary for the function of the nurses' station.

NOTE: Monitoring of security cameras is not generally considered a function of the nurse's stations unless it can be demonstrated that it is essential for patient care (i.e. psychiatric, NICU pediatrics, LDRP, etc.). It is not the intent to allow the nurses' station to function as a PBX or security station.

(4) Mobile or fixed medication dispensing units, classified as unit dose machines. If located outside the nurse station the unit shall be in a recessed alcove or located as not to obstruct the required width of the means of egress.

(5) Chairs in a quantity sufficient to accommodate the needs of the nurse station. Upholstered chairs shall meet the fire-retardant criteria of the Bureau of Home Furnishings Technical Bulletin #133, current edition.

(6) Trash containers that are constructed of noncombustible materials or that are flame resistant type listed by a California State Fire Marshal approved testing laboratory, not to exceed five (5) gallon capacity.

(7) One desk top combination copy/fax/printer where the paper supply tray does not exceed one (1) ream of supply paper, may be located at the nurse station.

NOTE: Refrigerated vending machines, large copy/fax/printing machines, ice making machines, coffee makers, toasters, toaster/ovens, microwave

ovens, portable heaters, and similar equipment shall not be located in or exposed corridor or exit, as defined by the California Building Code.

(8) The nurse station shall be provided with a portable fire extinguisher with a minimum rating of 2A:10BC and located no more than 25 feet travel distance from the nurse station.

(f) The following items may be placed in or at a custody station that opens directly onto a fire-resistive exit access corridor system in an I-3 occupancy provided the custody station is protected as required by the California Fire Code and California Building Code

(1) File cabinets and wall mounted wood or metal cabinets for records and/or medication, use and storage in quantities necessary for the function of the nurse station. Total capacity of cabinets not to exceed 4 drawers.

(2) A maximum of two (1) under-counter limited to the storage of patient medications or patient foods. The refrigerator shall be of recent manufacture and in good condition.

(3) Security monitors and other computer technology equipment necessary to monitor the area within the responsibility of the custody station.

NOTE: It is not the intent to allow the custody station to function as a control room.

(5) Chairs in a quantity sufficient to accommodate the needs of the security officer at the custody station. Upholstered chairs shall meet the fire-retardant criteria of the Bureau of Home Furnishings Technical Bulletin #133, current edition.

(6) Trash containers that are constructed of noncombustible materials or that are flame resistant type listed by a California State Fire Marshal approved testing laboratory, not to exceed two (2) gallon capacity.

(7) One desk top combination copy/fax/printer where the paper supply tray does not exceed one (1) ream of supply paper, may be located at the custody station.

NOTE: Refrigerated vending machines, large copy/fax/printing machines, ice making machines, coffee makers, toasters, toaster/ovens, microwave ovens, portable heaters, and similar equipment shall not be located in or exposed corridor or exit, as defined by the California Building Code.

(8) The custody station shall be provided with a portable fire extinguisher with a minimum rating of 2A:10BC and located no more than 25 feet travel distance from the custody station.

RATIONAL

Title 19 section 3.11 is very restrictive on the placement of combustibles in an exit or fire-rated corridor. The I-2 and I-3 occupancies have always had difficulty in meeting the letter of the code, because of this restriction. Many years ago in the 1980's, the State Fire Marshal (SFM) attempted to resolve part of this conflict through the use of a formal SFM interpretation for health care occupancies. This was utilized by SFM staff and local fire departments to provide some sort of guidance for the nurse stations, however, it remained

problematic. In 2003 the SFM adopted new regulations to Title 19 section 3.11 to provide clear guidance and requirements for the nurse station. However, after the adoption the regulations were recalled due to an administrative issue with regard to the adoption. OSHPD, who is the authority for public hospitals construction, but is not the Title 19 authority, attempted to provide guidance through a design interpretation, but the issue is one of ongoing fire and life safety and not one of design. The Work Group has recommended changes to the California Building and Fire Codes with regard to I-3 occupancies and restrained I-2 occupancies. The consensus of the group was to recommend this code change to Title 19, at the same time, in order to resolve the issue and provide guidance to these occupancies. The recommended changes are based on, and very similar, to the recommended regulations from 2003, with some updating for current technology, and which those regulations were based on the 1980's interpretation which worked very well for the health care industry.

Commentary to Specific Sections

CBC 202 CELL TIERS

The Working Group held several lengthy discussions with regard to the size of cell tiers. A revised definition has been provided to define the size of the cell tier to no more than one-third of the floor where supported by non-rated construction and two-thirds of the floor area where the upper tier is supported by rated construction. Table 601 allows interior nonbearing walls and partitions to be of non-rated construction. If the upper tier exceeds one-third of the floor area, then the upper tier must be supported by interior bearing walls of fire-resistance rated construction. However, as the tiers are part of the same story, there is no requirement to provide fire stopping or other protection for openings between the lower and upper tiers.

CBC 408.1.2.2

This code section was the catalyst for the formation of this Working Group. This section was new to the 2013 CBC. There was a significant difference between the intent of this code section and the application of the code section. The Working Group believes that the changes recommended to this section in this report, will address the clear intent of the original adoption of this section. When the prior working group recommended the adoption of this section, there was a clear understanding that these intervening space and uses would be supervised by custody staff. Based on the normal operations of intake, receiving and release areas and inmate program areas, it was understood that inmates would never be left alone in those areas and that custody staff would always be present when inmates occupied the areas. It was not the intent of the prior working group that all spaces of the area be under constant

surveillance or that it had to be within the immediate line of sight of the custody officers.

The issue was so significant, that the current working group made an attempt at clarifying the issue through the adoption of code language and requirements for detention suites and eliminating the existing code section on intervening rooms. After extensive, and passionate, discussions with committee members and several code experts, outside of the committee, resolved the current working group to scrap their attempt at creating detention suites, and provided for some modification to the existing code section for intervening rooms. It is the intent of this working group to allow detention facilities to utilize CBC 408.1.2.2 understanding that security personnel will be present to supervise the areas and the inmates, but observation is not required to be constant or in direct line of sight. As long as the security personnel have the ability to observe the spaces, by turning their bodies, or stepping around obstacles, the use of this section is acceptable.

Conclusion

The Working Group spent a significant amount of time discussing and researching the Group I-3 occupancy requirements. The Working Group wanted to bring clarity to the code requirements as well as have consensus on the interpretations of on the application of the California amendments to the I-3 occupancies. The members of the Working Group agreed on the following recommendations to the State Fire Marshal:

The Working Group is recommending the proposed changes to Title 19 and Title 24 that the Working Group developed within the report. These proposed code changes will bring uniform and consistent application of the California Building Standards to Group I-3 occupancies while accommodating the specialized needs of a secure environment.

In order to provide owners, industry, and enforcing agencies a better understanding of the unique factors related to fire and life safety in detention facilities. To facilitate code compliant designs and review of these facilities, this Working Group recommends the development of an *I-3 Occupancy Design Guide* for detention facilities.

It is the recommendation and desire of the Working Group to continue to be a standing group for future proposed code changes. The Working Group will reconvene as necessary as the California Building Standards need to be reviewed for updates to the code. The Working Group should be work with the

Office of the State Fire Marshal in the development of the *I-3 Occupancy Design Guide*.

The intervening rooms and corridor changes brought forward from the 2011 Working Group did not provide adequate clarity to the design community and enforcing agencies. This Working Group has proposed a code change that provides the required clarity for consistent application of the intent of the Working Group. These proposed changes to Section 408.1.2.2 have balanced fire and life safety with security and operation.

Provide for allowances for I-2 occupancies to secure mental health uses for the security of the patients (restraint).

Provide for allowances for I-3 occupancies to operate medical and mental health uses within the secured areas without conflicting with security requirements or conflicting detention fire code requirements. This issue has plagued the detention environment for many years without a definitive conclusion. The use of I-2 occupancies within I-3 uses became a significant issue with the advent of Correctional Treatment Centers within public hospitals in the early 1990's. With the required changes in medical care within the last twenty, the detention facilities and authorities having jurisdiction have struggled to construct code compliant facilities while needing them to be operationally efficient. This working group believes that the changes recommended in this report will either provide that clear guidance for this issue, or come very close to resolving these prior conflicts.